



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/572,879

12/11/2006

Roberto Defilippi

33033-1090

3660

45263

7590

12/27/2007

MITCHELL P. BROOK

LUCE, FORWARD, HAMILTON & SCRIPPS LLP

11988 EL CAMINO REAL, SUITE 200

SAN DIEGO, CA 92130

EXAMINER

COLEMAN, KEITH A

ART UNIT

PAPER NUMBER

4175

MAIL DATE

DELIVERY MODE

12/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/572,879	Applicant(s) DEFILIPPI, ROBERTO	
	Examiner Keith A. Coleman	Art Unit 4175	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/12/2006</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
It does not state that the person making the oath or declaration acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56. It currently states 1.56(a) and shows be corrected to state 1.56. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett (US Patent No. 6,216,675) in view of Brummer et al. (US Patent No. 5,445,130) and Watanabe et al. (US Patent No. 5,251,603).

With regards to claim 1, the patent to Bennett discloses a cooling device (28, Col. 3, Line 29, Col. 1, Lines 14-16, See Figure 1) for a fuel-recirculation circuit (Col. 3, Lines 28-32) from the injection system (14, Col. 2, Line 60, See Figure 1) to the tank (18, Col. 3, Line 12, See Figure 1) of a motor vehicle, which has a first opening and a second opening for connection to said recirculation circuit and comprises a pipe (28, See Figure 1) having a side wall (154, Col. 4, Line 28, See Figure 5) and a finned radiant body (32, Col. 3, Line 31) in a relationship of heat exchange with said pipe (28), end couplings (28, See Figure 1) connected hermetically to said pipe (28), an elongated body (28) housed in a through cavity (enclosed by fins 34, Col. 3, Line 32, See Figure 2) defined by said pipe (28), projections (32,34) radially interposed between said pipe (28) and said elongated body (28) to define internal passages traversed by said fuel, in that said projections (32, 34) are integrally formed on at least one of said pipe (28) and said

Art Unit: 4175

elongated body (28), and in that said end couplings (See Figure 1) are connected to said pipe (28) only except positively disclosing the elongated body is made of polymeric material and is interference fitted in said through cavity. As to the polymeric material, the patent to Brummer et al. discloses an elongated body is made of polymeric material. Since Bennett explicitly states that "other changes may be made in detail, especially in matters of shape, size, arrangement of the parts, order of steps or material of components within the principles of the invention", it would have been obvious to a person of ordinary skill in the art at the time the invention was made to substitute the material of the elongated body of Bennett with a polymeric material in view of the teaching to Brummer et al., in order to have a material that is resistant to fuel and heat. Furthermore, as the interference fit, the patent to Watanabe et al. discloses an elongated body (36) is interference fitted in a cavity (See Figure 6). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the elongated body of Bennett and Brummer with wherein the elongated body (36) is interference fitted in a cavity in view of the teaching to Watanabe, in order to prevent temperature rise of gasoline or fuel in the fuel tank or a motor vehicle (Col. 1, Lines 6-8).

With regards to claim 2, the patent to Bennett discloses said radiant body (10) comprises a plurality of fins that are longitudinal with respect to said pipe (See Figure 2).

With regards to claim 3, the patent to Bennett discloses said longitudinal fins are arranged in spoke-like fashion with respect to said pipe (See Figure 2).

With regards to claim 4, the patent to Bennett discloses said elongated body (10) is coaxial to said pipe (24, See Figure 1).

With regards to claim 5, the patent to Bennett discloses said elongated body (10) has at least one tapered end (139, See Figure 3).

With regards to claims 6 and 7, the patent to Bennett discloses said elongated body carries said projections in contact with said side wall of said pipe (24), thus defining said internal passages (See Figure 2).

With regards to claim 8, the patent to Bennett discloses said elongated body (10) has a circular cross section (See Figure 2).

With regards to claim 9, the combination of Bennett, Watanabe et al., and Brummer et al. discloses all the limitations of the claimed subject matter including Watanabe et al. discloses that the projections are helical.

With regards to claim 10 the patent to Bennett discloses characterized in that said projections are longitudinal (See Figures 1 and 2).

With regards to claim 11, the patent to Bennett discloses said at least one coupling comprises a substantially conical portion (138) housing a respective end (See Figures 1 and 2).

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davies et al. (US Patent No. 6,536,516).

With regards to claim 12, the patent to Davies et al. discloses method for manufacturing a cooling device (50) for a fuel- recirculation circuit (Col. 1, Lines 7-9) from the injection system to the tank of a motor vehicle, which has a first opening (created by coupling 66 and 60) and a second opening (tip of pipe 72) for connection to said recirculation circuit a finned radiant body (52 with fins 56), a pipe (76) carried by said finned radiant body (52, See Figure 3) in a relationship of heat exchange with said radiant body (52), and guide means for guiding the flow of fuel (opening in 76), said guide means being housed in said pipe (76) in order to define at least one path of flow of said fuel adjacent to a side wall of said pipe (76), said method being characterized by the fact of comprising the following steps : mounting with an interference fitting (76 connected to finned body 52 via coupling 66 and 60) said guide means into said pipe (76); and hermetically connecting to said pipe (76) a first (66) and a second coupling (60) respectively defining said first (created by 66 and 60) and second opening (tip of pipe 72) except positively disclosing wherein manufacturing said finned radiant body is

Art Unit: 4175

by an extrusion process. However, since Davies et al. discloses manufacturing a finned radiant body (12) is by an extrusion process (See Col. 3, Lines 65-68 through Col. 4, Lines 1-3), it would have been obvious to a person of ordinary skill in the art at the time the invention was made to manufacture the radiant body (52) of Davies et al. with an extrusion process, in order to have the base made to any desired length (Col. 4, Lines 1-5)

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Konopacki (US Patent No. 7,278,408) shows the current state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith A. Coleman whose telephone number is 571-270-3516. The examiner can normally be reached on Monday through Friday between 5:30-3 Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrence Till can be reached on (571) 272-1280. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 4175

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Terrence R. Till/
Supervisory Patent Examiner, Art Unit 4175

KAC
/K. A. C./
Examiner, Art Unit 4175

.